L 25731-65

ACCESSION NR: AT[illegible]

S/2888/64/000/006/0232/0305

AUTHOR: Matveyev, P. S.; Sinitsyn, A. S.

14

TITLE: Dynamic precision of an automatic control system with random parameters

SOURCE: Avtomaticheskoye upravleniye i vychislitel'naya tekhnika, no. 6, 1964, 232-305

B+1

no. 6, 1964, 232-

TOPIC TAGS: control system, automation, random variable, random parameter, Green function, linear integral equation, amplification factor

ABSTRACT: The purpose of the present work was to investigate the analysis and synthesis of systems with stationary, random parameters. It is assumed that the amplification factor of the system changes according to a random law, in the form of "white noise", so that the solution of the problem in the general case presents well-known difficulties. The system is considered with respect to one, two, or n impinging influences of either a random or a non-random character. The problem of synthesis is solved within a given time-region, using the correlation function connected with Green's function. The work is illustrated with various examples, demonstrating the

and 300 formulas. ... system considered. Orig. art. has: 17 figures

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L 25/3...-65

ACCESSION NR: AT4045213

ASSOCIATION: none

SUBMITTED: 00

ENCL: 01

SUB CODE: IE

NO REF SOV: 004

OTHER: 004

Card 2/3

L 41421-65 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(1) Pf-4 GS 33
ACCESSION NR: AT5009736 UR/0000/65/000/000/0183/0220 32
B+1

AUTHOR: [illegible], V. M.; [illegible], V. L.; Matveyev, [illegible]; Rozhdestvenskiy, Yu. B.

[illegible] study of control

[illegible]

[illegible] 1965, 183-220

TOPIC TAGS: statistical method accuracy, random process, correlation characteristic, spectral density, integral equation solution accuracy, automatic control system

ABSTRACT: V. V. Solodovnikov based the design of analytic adaptive systems and the statistical determination of the dynamic characteristics of controlled objects under normal operating conditions on an extensive use of computers (Statisticheskaya dinamika lineynykh sistem avtomaticheskogo upravleniya, Fizmatgiz, 1960). These machines evaluate the correlation characteristics and spectral densities of random processes and generate solutions of equations of the

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L 41821-65

ACCESSION NR: AT5009736

type

$$R_{xy}(\tau) = \int_0^\infty R_x(\tau - \lambda) k(\lambda) d\lambda \qquad (0.1)$$

The present article ... analyzes in detail the ... of random pro- ... in the determination ...

carried out by N. I. Chernyshev...

SUBMITTED: 15Dec64 ENCL: 00 SUB CODE: IE, MA

NO REF SOV: 011 OTHER: 005

Card 2/2

L 41423-65 EWT(1)/EWP(v)/EWP(k)/EWP(h)/EWP(1) Pf-4 GS
ACCESSION NR: AT5009738 UR/0000/65/000/000/0262/0287

28
B+1

AUTHOR: [illegible], P. S.; Sinitsyn, A. S.

TITLE: Determination of the optimum dynamic characteristics of automatic control systems consisting of nonideal elements

SOURCE: Analiticheskiye samonastroivayushchiyesya sistemy avtomaticheskogo [illegible] ([illegible] adaptive control systems). Moscow, Izd-vo Mashinostroy-

upravleniya (Analytical adaptive control systems). Moscow,
eniye, 1965, 262-287

TOPIC TAGS: optimum dynamic characteristic, automatic control system, nonideal control element, mean square error, nonideal system synthesis

ABSTRACT: Before one can decide whether a newly designed system should contain an adaptive feature, one must develop a method for determining the deviations of the system from the optimum operating conditions in the case of possible departures of the system's parameters from their respective "ideal" values. The method discussed in the present article yields, for a given chosen optimum dynamic characteristic of the control system, the increase in the mean square error caused by the nonideal properties of the elements. It also supplies the optimum

caused by the nonideal properties of the ...

Card 1/2

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[illegible] ate a possible [illegible]

values for the parameters of [illegible] under given conditions. The article also presents [illegible] minimum mean square error [illegible] a priori systems. [illegible] the design of arbitrary [illegible] systems having a nonminimal-phase specified [illegible] inputs from nonideal elements of systems [illegible] Solutions are obtained using the [illegible] part, and of systems with finite memories. [illegible] Green's function. Orig. art. [illegible] connections between the correlation function and [illegible] 12 figures, and 2 tables.

98 formulas, [illegible]

SUB CODE: IE

ASSOCIATION: None ENCL: 00

SUBMITTED: 15Dec64 OTHER: 003

NO REF SOV: 006

Card 2/2

MATVEYEV, P. T.

"Health protection in the Ukrainian SSR and the prospects of development"

report to be submitted for the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas - Geneva, Switzerland, 4-20 Feb 63.

MATVEYEV, P.Ya., inzhener.

New low-pressure sprayer. Avt.dor.20 no.1:30-31 Ja '57.
(MLRA 10:3)

(Fuel pumps)

MATVEYEV, R. F., Cand Phys-Math Sci (diss) -- "The connection between the properties of multidimensional stationary processes and the proerties of their spectral matrices". Moscow, 1959. 10 pp (Acad Sci USSR, Math Inst im V. A. Steklov), 175 copies (KL, No 10, 1960, 125)

16(1)

AUTHOR: Matveyev, R.F. SOV/20-126-4-6/62

TITLE: On the Regularity of Multidimensional Stationary Random Processes With Discrete Time

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 4, pp 713-715 (USSR)

ABSTRACT: Theorem: In order that the n-dimensional stationary random process $x(t) = (x_1(t), \dots, x_n(t))$ is regular with the rank m it is necessary and sufficient that:

1) the spectral functions $F_{ij}(\lambda)$ are absolutely continuous;

2) the rank of the matrix $f(\lambda) = \|f_{ij}(\lambda)\|$ almost everywhere is equal to m $\left(f_{ij}(\lambda) = \frac{dF_{ij}(\lambda)}{d\lambda}\right)$;

3) there exists a minor $M(\lambda)$ different from zero almost everywhere, of the order m of the matrix $f(\lambda)$, where

$$\int_{-\pi}^{\pi} \log M(\lambda) d\lambda > -\infty ;$$

4) the functions $\Theta_{ik}(\lambda) = \frac{M_{ik}(\lambda)}{M(\lambda)}$, $i = m+1, \dots, n$; $k = 1, \dots, m$, are boundary values of functions of the class N_δ for a certain $\delta > 0$.

Card 1/2

On the Regularity of Multidimensional Stationary Random Processes With Discrete Time SOV/20-126-4-6/62

Let $M(\lambda)$ be denoted with $S = \| f_{pq}(\lambda) \|$, $p,q=1,\dots,m$; $M_{ik}(\lambda)$ denotes the determinant of the matrix S_{ik} arising from S if the row f_{kp}, $p=1,\dots,m$ is replaced by the row f_{ip}, $p=1,\dots,m$.
The author uses a similar theorem of Rozanov [Ref 3].
There are 5 references, 4 of which are Soviet, and 1 American.

ASSOCIATION: Matematicheskiy institut imeni V.A.Steklova Akademii nauk SSSR (Mathematical Institute imeni V.A.Steklov AS USSR)

PRESENTED: February 28, 1959, by A.N.Kolmogorov, Academician

SUBMITTED: February 15, 1959

Card 2/2

MATVEYEV, R.F. (Moskva)

Singular multidimensional stationary processes. Teor. veroiat. i
ee prim. 5 no.1:38-44 '60. (MIRA 13:10)
(Probabilities)

16.6100 25015 S/052/61/006/002/002/006
C111/C222

AUTHOR: Matveyev, R.F.

TITLE: On regular multi-dimensional stationary processes

PERIODICAL: Teoriya veroyatnostey i yeye primeneniye, v.6, no.2, 1961, 164 - 181

TEXT: Let $\mathfrak{X}(t) = \{x_1(t), \ldots, x_n(t)\}$ be a stationary process, where $\mathsf{M}x_i(t) = 0$, $\mathsf{M}[x_i(t+\tau)\overline{x_j(t)}] = B_{ij}(\tau)$, where $B(\tau)$ is the correlation matrix. Let F^x_{kj} be the spectral measures of the process $\mathfrak{X}(t)$ and $f^x_{kj}(\lambda)$ be their derivatives. The matrix $f_x(\lambda) = \|f^x_{kj}(\lambda)\|$ is called the spectral matrix.

Definition 1 : Let the stationary process $\mathfrak{X}(t)$ have the rank m if $f_x(\lambda)$ almost everywhere has the rank m.

Definition 2 : A function $f(z)$ analytic in a region D of the complex plane belongs to the class H_δ in D if the subharmonic function $|f(z)|^\delta$ in D has a harmonic majorant.

Definition 4 : A function $g(z)$ analytic in the lower halfplane belongs to the class N_δ if $g(z) = f_1(z)/f_2(z)$, where f_1 and f_2 are functions

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APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932930011-8"

of the class H_ς in the lower halfplane.

Theorem 1 : Necessary and sufficient that the stationary process $x(t)$ of the rank m is regular, is :

(I) There exists a principal minor $M(\lambda)$ of the order m of $f_x(\lambda)$ so that it holds

$$\int_{-\infty}^{\infty} \frac{\log M(\lambda)}{1 + \lambda^2} d\lambda > - \infty \qquad (5)$$

(e.g. : $M(\lambda) = \| f^x_{kl}(\lambda) \|$; $k,l = \overline{1,m}$) .

(II) The functions

$$\Theta_{ik}(\lambda) = M_{ik}(\lambda)/M(\lambda) \ ; \quad i = \overline{m + 1,n} \ ; \quad k = \overline{1,m} \qquad (6)$$

(where M_{ik} are determinants of matrices arising from M by replacing the k-th row $\{f^x_{k1}(\lambda), \dots f^x_{kn}(\lambda)\}$ by the row $\{f^x_{i1}(\lambda), \dots, f^x_{in}(\lambda)\}$) are limit values of functions $\Theta_{ik}(z)$ $(\Theta_{ik}(\lambda) = \lim_{\mu \to 0} \Theta_{ik}(\lambda - i\mu)$ of the class

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N_δ for a certain $\delta > 0$. Then the author considers the problem of the linear extrapolation for processes of the rank 1. The problem is solved for processes with a discrete time in (Ref. 10 : Yu.A. Rozanov, Lineynaya ekstrapolyatsiya mnogomernykh statsionarnykh protsessov ranga 1 s diskretnym vremenem [Linear extrapolation of multidimensional stationary processes of the rank 1 with a discrete time], DAN SSSR 125,2 (1959), 277 - -280). The author uses the idea of (Ref. 10) and constructs an analogous solution of the problem for the case of a continuous time. Here the author essentially uses the representation

$$x_j(t) = \int_{-\infty}^{\infty} e^{it\lambda} \varphi_j(\lambda) d\beta(\lambda) = \int_{-\infty}^{t} c_j(t-p)dr(p) \quad (j=\overline{1,n}) \qquad (20)$$

of (Ref. 7 : Ye.G. Gladyshev, O mnogomernykh statsionarnykh sluchaynykh protsessakh [On multidimensional stationary random processes] Teoriya veroyat i yeye primen., II, 4 (1958), 458-462). Here $c_j(t)$, $r(p)$ - - Fourier transforms of $\varphi_j(\lambda)$, $\beta(\lambda)$; $\beta(\lambda)$ is a process with non-correlated increases, where $M\left\{\int_{\Lambda_1} d\beta(\lambda) \cdot \int_{\Lambda_2} \overline{d\beta(\lambda)}\right\} = \mu(\Lambda_1 \cap \Lambda_2)$, $\mu(\cdot)$

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is a Lebesgue measure ; the $\varphi_j(\lambda)$ satisfy the system

$$\left.\begin{aligned} |\varphi_1(\lambda)|^2 &= f^x_{11}(\lambda) , \\ \varphi_2(\lambda) &= \frac{f^x_{21}(\lambda)}{f^x_{11}(\lambda)} \varphi_1(\lambda) , \\ &\cdots\cdots\cdots\cdots \\ \varphi_n(\lambda) &= \frac{f^x_{n1}(\lambda)}{f^x_{11}(\lambda)} \varphi_1(\lambda) \end{aligned}\right\} . \qquad (21)$$

Besides the $\varphi_j(\lambda)$ are limit values of certain functions $\Gamma_j(\lambda - i\mu)$ for $\mu \to 0$. The extrapolation problem is reduced to the determination of a solution $(\varphi_1(\lambda), \ldots, \varphi_n(\lambda)$ of (21) so that for every other solution $\hat{\varphi}_1(\lambda), \ldots, \hat{\varphi}_n(\lambda)$ of (21) it holds $|\Gamma_j(z)| \geqslant |\hat{\Gamma}_j(z)|$; $\operatorname{Im} z < 0$, $j = \overline{1,n}$.

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On regular multi-dimensional ... S/052/61/006/002/002/006 C111/C222

Finally the author considers a multidimensional process of the rank 1 the spectral matrix of which consists of rational functions. In this case the extrapolation problem can be solved in another manner as before where the process r(p) is determined effectively.

The author mentions A.N. Kolmogorov, V.N. Zasukhin, Yu.A. Rozanov, A.M. Yaglom.

There are 11 Soviet-bloc and 3 non-Soviet-bloc references. The reference to the English-language publication reads as follows: H. Cramer. On the theory of stationary random processes, Ann.Math., 41 (1940), 215-230.

SUBMITTED: July 23 1959

X

Card 5/5

9,1300

24874 S/109/61/006/007/014/020
D262/D306

AUTHOR: Matveyev, R.F.

TITLE: Evaluation of the subsidiary wave in a long waveguide

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 7, 1961, 1157 - 1164

TEXT: In the propagation of an H_{01} mode in a waveguide, parasitic modes are formed, at the waveguide inhomogeneities. Some of these waves may again revert to the original mode propagated in the same direction as the wave carrying the information, being shifted in phase with respect to the original. They constitute what is known as the "side stream" - a subsidiary wave., which distorts the useful signal. In the present article the author gives the mathematical analysis of such wave as resulting from the transmission of pulses through a long waveguide. If the power of the subsidiary wave is small compared with that of the signal then it can be assumed. that the subsidiary wave is formed from two transformations: ori-

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ginal wave-parasitic wave - original wave and of most importance for evaluating the subsidiary wave is the quantity dq(z) - the ratio of the amplitude of the parasitic wave, formed at a small waveguide inhomogeneity at a certain section of it, (z, z + dz) to the amplitude of the original wave at point z. Another notation is as follows: $a(z, \theta)$ - the actual radius of the cylindrical waveguide (z, - cylindrical coordinates), a_0 - the mean value of $a(z, \theta)$;

$$q_p(z) = \frac{1}{\varepsilon_p a_0 \pi} \int_0^{2\pi} [a(z, \theta) - a_0] e^{ip\theta} d\theta,$$

where $\varepsilon_0 = 2$; $\varepsilon_p = 1$ for $p > 0$. The function $q_p(z)$ is the sum

$$q_p(z) = q_{1p}(z) + q_{2p}(z),$$

where $q_{1p}(z)$ - a continuous function; $q_{2p}(z)$ a step function, with steps at points z_1, z_2 ... of contact of two wave guides. If there are no waveguide joints then $q_{2p}(z) = 0$ and if the wave is of the

H_{pm} mode then $dq(z)$ is given by

$$dq(z) = c_1(p, m)\, dq_{1p}(z) + c_2(p, m)\, dq_{2p}(z), \quad (1)$$

where c_1 and c_2 are constants which depend only on the modes of parasitic waves as shown by B.Z. Katsenelenbaum and V.V. Malin (Ref. 2: Radiotekhnika i elektronika, 1958, 3, 6, 750). Further in the article indices m and p are omitted. It is assumed further that $q_1(z)$ is a stationary random gaussian process having correlation function $\sigma_1^2 B(z)$ $[B(o) = 1]$ and that steps $dq_2(z)$ at discrete points are independent and similarly distributed random quantities having dispersions equal to σ_2^2. It is also assumed that quantities $dq_1(x)$ and $dq_2(y)$ are independent for any x and y. Also following V.I. Buminovich and V.A. Morozov (Ref. 1: Radiotekhnika i elektronika, 1959, 4, 10, 1585) it is assumed that the lumped inhomogeneities are, at a distance $L + \eta_j$ from each other ($j = 1, 2 \ldots$), L being the mean length of the guide, η_j - random independent quantities evenly distributed along a section $(-\delta, \delta)$ and $\delta/L \ll 1$. Let $E_n(z, t)$ be the field strength of the subsidiary wave at point z of the waveguide and $E_0(z)$ that of the original wave carrying the information. Then, assuming the notation and the mechanism of formation of subsidiary wave as given by Bumimovich and Morozov (Ref. 1: Op.cit.) and that the useful signal consists of a multitude of random following rectangular pulses of duration τ and equal spacing, the subsidiary wave can be represented as the sum

$$E_n(z, t) = E_0(z) \sum_k \varepsilon_k \int_0^z dq(x) \int_x^z \chi_{[0,\tau]}\left(t - k\tau - \frac{z}{v_1} - \theta(y - x)\right) \times \times e^{-\beta_1(y-x)} \cos[\omega t - \varphi_k - \beta_2(y - x)]\, dq(y) \quad (2)$$

(the k-th term represents the subsidiary wave formed by the transmission along the line of the k-th pulse). In this equation $\beta_1 = \alpha_n - \alpha_1$; α_n α_1 - attenuation factors of the amplitudes of the parasitic and basic waves respectively; $\beta_2 = h_n - h_1$; h_n, h_1 - their respective phase constants; $\varepsilon = \frac{1}{v_n} - \frac{1}{v_1}$; v_n, v_1 - their respective group velocities, φ_k - the initial phase of the k-th pulse, ω carrier frequency

$$\chi_{[0,\ \tau]}(t) = \begin{cases} 1 \text{ for } t \in (0,\ \tau), \\ 0 \text{ for } t \bar{\in} (0,\ \tau); \end{cases}$$

ε_k - independent with respect to each other's random quantities equal to unity with probability p and to zero with probability 1-p. The average losses for transforming the wave at distributed inhomogeneities are finally determined by

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$$\sigma_1^2 |\hat{c}_1|^2 M \left| \int \eta_1(x) e^{-i\beta_2 x} dx \right|^2 = 2\beta_2^2 (c_1\sigma_1)^2 \int_0^z (z - x) B(x) \cos \beta_2 x dx.$$

so that the average attenuation coefficient of the original wave introduced by spurious waves is

$$\frac{(c_1\sigma_1)^2}{L} + 2\beta_2^2 (c_1\sigma_1)^2 \int_0^\infty B(t) \cos \beta_2 t dt = \gamma_1.$$

the same formula was obtained in a different way by N. Larsen (Ref. 6: Frequenz, 1960, 14, 4, 135). The presence of the additional factor γ_2 is due to the intermittent character of signal transmission. Katsenelenbaum and Rozanov (Ref. 2: Op.cit.) obtained

$$\frac{p_n(z)}{p_0(z)} = \frac{p z \gamma_1^2}{2\beta_1} \qquad (12)$$

for the ratio of the subsidiary wave power to that of the signal.

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The results of the present work show however that the above formula should in fact be changed to that of

$$\frac{P_2(z)}{P_1(0)} = \frac{\pi z}{2\beta_1}(\gamma_1^2 + \gamma_2^2). \tag{13}$$

On the other hand the evaluation of the subsidiary wave is made much easier using Eq. (12) than Eq. (13) provided $\gamma_1/\gamma_2 > 1$. This condition is given as

$$\frac{\gamma_1}{\gamma_2} = \sqrt{\frac{2h}{\beta_1\tau}}\,\frac{\left|\beta_2\int_0^\infty B(t)\cos\beta_2 t\,dt\right|}{\left|1 - \beta_2\int_0^\infty B(t)\sin\beta_2 t\,dt\right|}. \tag{14}$$

which for $\beta_2 z_c \longrightarrow 0$ tends to zero as well for any correlation function. It is thought that a random process $q_1(z)$ having a correlation function as in

$$f(\omega) = \int_0^\infty B(z) \cos \omega z dz = \frac{z_c}{[1 + (\omega_0 - \omega)^2 z_c^2]^2} + \frac{z_c}{[1 + (\omega_0 + \omega)^2 z_c^2]^2} . \quad (16)$$

determines the line inhomogeneities much better as compared with processes having the correlation functions

$$B(z) = e^{-\left(\frac{z}{z_c}\right)^2}$$

of $B(z) = \sin \Omega z/\Omega z$. The graphs are given of the ratio γ_1/γ_2 as a function of ω_0/β_2 with $q = \beta_2 z_c$ as parameter. Under the following assumptions $q_1(z) = q_{11}(z)$; $m = 2_c$ so that the spurious wave is introduced by a H_{12} mode; waveguide diameter 60 mm; wavelength 8 mm; $\tau = 5 \cdot 10^{-9}$ sec so that $\beta_2 = 0.1$ cm^{-1}; $\beta_1 = 0.283 \cdot 10^{-5}$

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cm^{-1}; $\theta = 45 \cdot 10^{-14}$ sec/cm; and assuming Eqs.

I. $\beta_1 z \gg 1$, II. $\beta_1 z_c \ll 1$, III. $\frac{z\theta}{\tau} \gg 1$, IV. $\frac{z_c\theta}{\tau} \ll 1$,

$$\text{V. } \frac{\beta_1^2 z^2}{L} \ll 1;$$

3 km $\ll z \ll$ 50,000 km; $z_c \ll$ 100 m; γ_1/γ_2 becomes less than unity for $q \leqslant 0.07$. There are 1 figure and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc.

SUBMITTED: August 27, 1960

Card 9/9

S/052/62/007/002/005/005
C111/C222

AUTHOR: Matveyev, R.F.

TITLE: On the question concerning the filtration of stationary processes

PERIODICAL: Teoriya veroyatnostey i yeye primeneniya, v.7, no. 2, 1962, 220-222

TEXT: Let the stationary process $x(t) = \int_{-\infty}^{\infty} e^{it\lambda}\, dZ(\lambda)$ have the spectral density $f(\lambda) = |B(\lambda)|^2/|A(\lambda)|^2$, where $A(\lambda)$ and $B(\lambda)$ are polynomials of degrees n and m $(m<n)$ with roots in the upper half plane. Let $\Delta r(t)$ be the Fourier transform of $dZ(\lambda)/\varphi(\lambda)$, where $\varphi(\lambda) = B(\lambda)\overline{D(\lambda)}/A(\lambda)D(\lambda)$, $D(\lambda)$ a polynomial of degree l with roots in the upper half plane and l runs through all natural numbers. Let $H^x(t)$ and $H^{\Delta r}(t)$ be the closed linear hulls of the random variables $\{x(\tau);\ \tau \leqslant t\}$ and $\{\Delta_p r(\tau);\ \tau \leqslant t;\ p>0\}$ and let $H^0(t)$ be the

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On the question concerning ... S/052/62/007/002/005/005
C111/C222

closed linear hull of all spaces $H^{\Delta r}(t)$, where dr(p) corresponds to all possible representations of $\varphi(\lambda)$ as above, and H^x the closed linear hull of all spaces $H^x(t)$ $(-\infty < t < \infty)$.
The author investigates the properties of the spaces $H^{\Delta r}(t)$ and proves the
Theorem : $H^o(t) = H^x$.

SUBMITTED: August 24, 1960

Card 2/2

S/109/62/007/008/003/015
D409/D301

6.9700

AUTHOR: Matveyev, R.F.

TITLE: Dependence of the probability of distortion (due to Gaussian noise) of pulse-code modulation signals on the number of regenerators, in the case of large signal-to-noise ratios

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 8, 1962, 1294-1301

TEXT: The distortion probability in a*transmission line, consisting of n amplifying circuits, is estimated. First, it is assumed that the regenerative amplifiers are ideal. The distortion probability Y_n is defined as the sum of the probability of receiving a pulse at the end of the line, instead of the space transmitted, and of the probability of receiving a space, instead of the pulse transmitted. It is stipulated that the n-th regenerative amplifier records a pulse if the voltage of the signal envelope exceeds the value $\theta_n E_{mean}$, where E_{mean} is the mean amplitude of the pulse; the

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*liniya svyazi = communication circuit

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D409/D301

Dependence of the probability ...

parameter θ_n is called the optimal limiting-level; it is determined from the minimum condition of Y_n. Formulas are derived, expressing Y_n in terms of the line characteristics. This involves the derivation of recursion formulas for the probability-densities W_{2k} ($k = 1, ..n$) of the signal-envelope voltages at the input of the k-th regenerative amplifier. After calculations, one obtains for Y_n:

$$Y_n = \sqrt{p(1 - p)} \left\{1 - \left[1 - \frac{1,5}{\sqrt{q}} e^{-\frac{q^2}{8}}\right]^n\right\}; \qquad (8')$$

p denotes the probability of transmitting a pulse, $q = E_{mean}/\sigma$ (σ is the variance). If $n \ll e^{q^2/8}$, one obtains the formula

$$Y_n \simeq n \sqrt{p(1 - p)} \frac{1,5}{\sqrt{q}} e^{-\frac{q^2}{8}}.$$

Further, the case of non-ideal regenerative amplifiers is considered. After calculations one obtains

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$$\frac{Y_k - Y_{k-1} - Y_1}{Y_1} = \frac{q^4}{32} c_1^{(k)} + \frac{q^2}{8} c_2^{(k)}, \qquad (14)$$

where c_1 and c_2 are constants which represent increments to the mean noise-power, due to the non-ideal character of the regenerative amplifier. The conditions are ascertained, under which θ_k (the optimal limiting-level) is practically independent of k (the number of the regenerative amplifier); these conditions are determined for both the ideal- and non-ideal case. The use of formula (14) is illustrated by an example.

X

SUBMITTED: November 14, 1961

47114

S/109/62/007/010/001/012
D271/D308

AUTHOR: Matveyev, R.F.

TITLE: Probability of distortion of pulse-code modulated signals caused by some non-gaussian noises

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 10, 1962, 1703 - 1710

TEXT: Transmission of nanosecond p.c.m. pulses in a waveguide transmission line is considered and the probability is calculated of false signal detection because of joint effect of gaussian noise and dispersional distortion. The regenerator at the output end of the line produces pulses when the signal voltage envelope, at the center of the elementary message, exceeds a certain base level. The optimal level must be found from the condition of least probable false detection. Nanosecond pulses are subjected to substantial distortion due to the nonlinear relationship between the propagation constant and frequency, the pulse width increases and it may distort the adjacent message. Output voltage equations for all possible combinations of a message and its two neighbors, and for the probabili-

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ty of false detection are formulated. Expressions are derived for the density of probability function of signal envelope in all possible combinations, and simplified, assuming that noise is very small in comparison with the signal. The final expression relates the probability of error with a certain base level to the amplitude of pulse in the central point of its duration, to its dispersion, to the amplitude of the previous pulse at the considered instant, and to the probability of marks on both sides of the considered message. Graphs of optimal level of operation are given in function of the pulse amplitude and of the encroaching amplitude of the adjacent pulse. Error probability is greater than 0.001 when the ratio of the encroaching to the legitimate amplitude is 0.2. E.A. Marcatili's paper (Bell System Techn. J., v. 40, 1961, no. 3, 921) is criticized for insufficiency of exactitude in calculating density of probability distribution.

SUBMITTED: November 14, 1961

[illegible] EWT(1)/BDS/EEC(b)-2 AFFTC/ASD/ESD-3/RADC [illegible]
S/109/63/008/004/005/030

64

AUTHOR: Matveyev, R. F.,

TITLE: On measuring power losses in short waveguide lines

PERIODICAL: Radiotekhnika i elektronika, v. 8, no. 4, 1963, 577-584

TEXT: Power losses in the conversion of a principal wave (H_{01}) into parasitic waves in various waveguide lines—even those consisting of sections made by the identical technological process—are, generally speaking, not the same. This is due to the fact that irregularities in the internal parameters of sections where the conversion of the wave occurs, vary at random from section to section. The article describes how, by measuring power losses in a short waveguide line, it is possible to determine the mean value for losses in a system of lines, the irregularities in which possess some common statistical properties.

SUBMITTED: March 30, 1962

Card 1/1

MATVEYEV, R.F.

Linear loss factor of an H_{01} wave in a long wave guide line. Radiotekh. i elektron. 8 no.8:1477-1480 Ag '63. (MIRA 16:8)
(Wave guides) (Electromagnetic waves)

ACCESSION NR: AP4040748 S/0142/64/007/002/0154/0163

AUTHOR: Kozelev, A. I.; Matveyev, R. F.

TITLE: Use of a pulse sequence to measure the loss of the H_{01} mode in a multimode waveguide

SOURCE: IVUZ. Radiotekhnika, v. 7, no. 2, 1964, 154-163

TOPIC TAGS: waveguide propagation, waveguide loss, line loss, microwave technology, measuring apparatus

ABSTRACT: The method is neither new nor unknown (it is described, for example, by S. E. Miller and A. C. Beck, PIRE, 1953, v. 41, no. 3, 348 and by A. P. King and G. D. Mandeville, BSTJ, 1961, v. 40, no. 5, 1323), but the authors claim that this is the first complete analysis of the phenomena that occurs during the course of the measurements. The method is based on feeding a pulsed signal from a generator through a weak-coupling diaphragm into the tested line, which is shorted on

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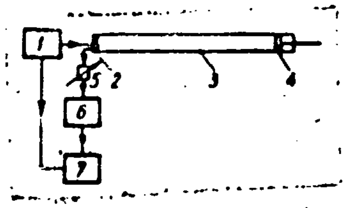
ACCESSION NR: AP4040748

the other end by a moving plunger, and letting the signal circulate in the line. The losses are regarded as due to two principal factors -- coupling between the H_{01} mode and the parasitic waves generated on line inhomogeneities, and dispersion distortion of the pulse. It is shown how variation of the line length (by means of the plunger) changes the coupling between the various parasitic waves and the fundamental (H_{01}) mode, and causes a corresponding periodic variation in the losses. This process is obviously dependent on the frequency (pulse duration). Reduction in the pulse duration facilitates the measurements, but the shorter the pulse the higher the dispersion distortion. A procedure for selecting the optimal pulse duration is indicated. Orig. art. has: 3 figures and 12 formulas.

ASSOCIATION: None

SUBMITTED: 15Jul62 DATE ACQ: ENCL: 01

SUB CODE: EC NR REF SOV: 001 OTHER: 005



Loss measurement setup

1 - generator, 2 - diaphragm, 3 - tested line,
4 - short-circuiting plunger, 5 - measuring
attenuator, 6 - receiver, 7 - indicator

Card 3/3

MATVEYEV, R.F. (Moskva)

Asymptotic behavior of a system of linear differential equations with small random coefficients. Teor. veroiat. i ee prim. [illegible] no.3:560-[illegible] '65. (MIRA 18:[illegible])

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932930011-8"

ACC NR: AP6036369 SOURCE CODE: UR/0109/66/011/011/1960/1966

AUTHOR: Matveyev, R. F.

ORG: none

TITLE: Analysis of the passage of waves through a nonhomogeneous medium

SOURCE: Radiotekhnika i elektronika, v. 11, no. 11, 1966, 1960-1966

TOPIC TAGS: electromagnetic wave, electromagnetic wave refraction, waveguide, confocal lens line, wave conversion loss, refraction coefficient

ABSTRACT: Theoretical methods for investigating the propagation of electromagnetic waves along a confocal lens line are described which take into account the effect of the external medium (i. e., the coefficient of refraction of the medium is assumed to the variable). An expression is obtained for the field of the basic wave after its passage through a large number of lenses. Conversion losses in the basic wave (during transformation into other waves) are computed on the assumption that the variation in the refraction coefficient is random. Orig. art. has: 32 formulas. [Author's abstract] [SP]

SUB CODE: 20/SUBM DATE: 08Jun65/ORIG REF: 005/OTH REF: 002/

Card 1/1

MATVEYEV, R.I., kapitan

Tubes with a secondary electronic emission. Vest. protivovozd. obor. no.7:68-70 Jl '61. (MIRA 14:8)
(Electron tubes)

ZAYTSEV, A.P., inzhener-podpolkovnik; MATVEYEV, R.I., kapitan tekhnicheskoy slushby, voyennyy tekhnik pervogo klassa

They made it themselves. Vest.Vozd.Fl. no.8:34 Ag '61. (MIRA 14:8)

(Bombsights)

MATVEYEV, R.P.

Wider spacing is necessary to accelerate the growth of planted trees. Put' i put.khoz. 5 no.6:29-30 Je '61. (MIRA 14:8)

1. Nachal'nik otdela zashchitnykh lesonasazhdeniy Yuzhno-Ural'skoy dorogi. (Tree planting)

MATVEYEV, S., inzh.

Electrical charges and electric field. Radio no.3:31-32 Mr '62.
(MIRA 15:3)

(Electric charge and distribution)

ALIMOV, V.A., assistent; POLYAKOVA, G., student; MANULKIN, A., student;
MATVEYEV, S., student

Atherosclerosis according to autopsy data of clinics of the Tashkent State Medical Institute collected during 12 years (1949-1960). Med. zhur. Uzb. no.4:51-54 Ap '63. (MIRA 17:4)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. G.N. Terekhov) Tashkentskogo gosudarstvennogo meditsinskogo instituta.

MATVEYEV, S., inzh.

Direct current. Radio no.4:31-32 Ap '62. (MIRA 15:4)
(Storage batteries)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932930011-8"

MATVEYEV, S., inzh.

Direct current and the magnetic field. Radio no.5:28-32 My '62. (MIRA 15:5)

(Magnetic fields) (Electricity)

MATVEYEV, S., inzh.

Magnetic field. Radio no.6:26-30 Je '62. (MIRA 15:5)
(Magnetic fields) (Electromagnetism)

S. D. Matveyev

Mining Mechanical Engineering (Gornaya Mekhanika) Pod Red. V. D. Terpigoreva I. Moskva, Ugletekhizdat, 19
V. Illus., Diagrs.
Collection Of Articles From The English and American Press Published Between 1927-1953.
Lib. Has: v.6.

TERPIGOREVA, Vera Dmitriyevna; MATVEYEV, Sergey Dmitriyevich; ZAVARITSKAYA, Marianna Aleksandrovna; GALYUTA, Ye.Z., otvetstvennyy redaktor; VZHODNEVA, I.V., redaktor izdatel'stva; ALADOVA, Ye.I., tekhnicheskiy redaktor

Geology. Moskva, Ugletekhizdat [Text in English with English-Russian dictionary.] Pt.1. 1956. 73 p. (MLRA 10:2)
(Geology--Terminology)

MATV... Sergey Dmitriyevich

TERPIGOREVA, Vera Dmitriyevna; MATVEYEV, Sergey Dmitriyevich; MEL'KUMOV, L.G., otvetstvennyy redaktor; KHODNEVA, I.V., redaktor izdatel'stva; ALADOVA, Ye. I., tekhnicheskiy redaktor

Electricity. Moskva, Ugletekhizdat. [with English-Russian dictionary] No.3. 1956. 88 p. (MLRA 10:5)
(Electricity)

TERPIGOREVA, Vera Dmitriyevna; MATVEYEV Sergey Dmitriyevich; SUMTIN, G.G., otvetstvennyy redaktor; ALADOVA, Ye.I., tekhnicheskiy redaktor

[Mining engineering; a textbook for translating mining engineering literature from English to Russian] Gornaia mekhanika; uchebnoe posobie po perevodu s angliiskogo na russkii iazyk gornotekhnicheskoi literatury. Moskva, Ugletekhizdat. Vol.3. 1956. 326 p. (MIRA 9:9)

(Mining engineering)
(English language--Translating)

MATVEYEV, S. D.

TERPIGOREVA, Vera Dmitriyevna; ~~MATVEYEV, Sergey Dmitriyevich~~; VATOLIN, Ye.S., otvetstvennyy redaktor; KHODEEVA, I.V., redaktor izdatel'stva; ZAZUL'SKAYA, V.F., tekhnicheskiy redaktor

Shaft sinking and drifting. Moskva, Ugletekhizdat. (Uchebnoe posobiia po perevodu gorno-tekhnicheskoi literatury) [Text in English with English-Russian dictionary]. No.4. 1956. 78 p.
(Coal mines and mining) (MLRA 10:7)

MATVEYEV, ...

TARPIGORSVA, Vera Dmitriyevna; [redacted] MURATKHANOVA, V.F., redaktor izdatel'stva; [redacted] tekhnicheskiy redaktor

Mining machines. Moskva, Ugletekhizdat, (Uchebnye posobiia po perevodu gorno-tekhnicheskoi literatury) No. 6. 1957. 76 p. [Text in English with English-Russian dictionary.] (MIRA 10:10)
(Coal mining machinery)

KOSMINSKIY, B.M., kand.ekon.nauk; MATVEYEV, S.D.; TERPIGOREVA, V.D.; VOROB'YEV, B.M., kand.tekhn.nauk, otv.red.; MEL'KUMOV, L.G., gorn.inzh., otv.red.; GADZHINSKAYA, M.A., red.-izd-va; ALADOVA, Ye.I., tekhn.red.

[English-Russian mining engineering dictionary] Anglo-russkii gornotekhnicheskii slovar'. Pod red. B.M.Vorob'eva i L.G.Mel'-kumova. Moskva, Ugletekhizdat, 1958. 478 p. (MIRA 11:12)
(Mining engineering--Dictionaries)
(English language--Dictionaries--Russian)

KOLPAKOV, V.A., MATVEYEV, S.F.

Automatic measurement of the flow of weak nitric acid and conversion to composition by weight. Khim.prom. 2:148-151 My '60. (MIRA 13:7)
(Nitric acid) (Automatic control) (Flow meters)

MATVEYEV, S.F.; KOLPAKOV, V.A.; REBITSKIY, A.F.

Developing a method of automatic control of nitro-oleum composition. Khim. prom. no.8:596-600 Ag '63. (MIRA 16:12)

MATVEYEV, Semen Grigor'yevich; ROGITSKIY, S.A., doktor tekhn. nauk, retsenzent; ANDREYEV, Ye.T., kand.tekhn.nauk, retsenzent; LEVIN, L.I., retsenzent; SHMELEV, A.I., red. izd-va; BOLDYREVA, Z.A., tekhn. red.; PROZOROVSKAYA, V.L., tekhn. red.

[Mine buildings] Rudnye sooruzheniia. Moskva, Gosgortekhizdat, 1962. 579 p. (MIRA 15:7)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury (for Rogitskiy).

(Mine buildings)

MATVEYEV, S.I.

Eliminate defects in providing living space for Moscow residents.
Go[redacted]. 35 no.8:16-18 Ag '61. (MIRA 14:8)

1. Zamestitel' zaveduyushchego Otdelom gorodskogo khozyaystva Moskovskogo gorodskogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza.

(Moscow--Housing)

L 8467-65 EWT(1)/EPA(b)/EWT(m)/EPF(c)/FCS/EWG(v)/EPR/EWP(j)/T/EWP(c)/FCS(k)/ EWP(b)/EWA(1) Pc-4/Po-4/Pq-4/Pe-5/Pq-4/Pr-4/Ps-4/Pi-4 ASD(f)/AFETR/AEDC(a)/ ASD(d)/AFTC(a)/SSD/AFWL/BSD/ESD(gs)/ESD(t)/ESD(si) JD/WW/JW/RM

ACCESSION NR: AP4044464 S/0043/64/000/003/0159/0162

AUTHOR: Matveyev, S. K.

TITLE: Unsteady surface melting of bodies subjected to aerodynamic heating

SOURCE: Leningrad. Universitet. Vestnik. Seriya matematiki, mekhaniki i astronomii, no. 3, 1964, 159-162

TOPIC TAGS: aerodynamic heating, aerodynamic melting, laminar flow, boundary layer, stagnation temperature, Lagrange variable

ABSTRACT: A problem of unsteady aerodynamic melting of a body with formation of a liquid film on the surface is investigated. The motion of a film under the action of a pressure gradient and skin friction considered at times close to the onset of melting is of a laminar nature and is described by a system of equations equivalent to those [illegible] mately equal. A method using the Lagrange variables is outlined

L 8467-65

ACCESSION NR: AP4044464

which makes the solution of the problem much easier; at times close to the onset of the melting process. Orig. art. has: 1 figure and 14 formulas.

ASSOCIATION: none

SUBMITTED: 06May63 ATD PRESS: 3098 ENCL: 00

SUB CODE: MM NO REF SOV: 004 OTHER: 000

ADD. CLUE WORD: ABLATION

MATVEYEV, S.K.;

Unsteady melting of bodies by aerodynamic heating. Vest. LGU 19 no.13:159-162 '64 (MIRA 17:8)

MATVEYEV, S. K.

"Unsteady flow of a liquid film formed by melting."

report submitted for 2nd All-Union Conf on Heat & Transfer, Minsk, 4-12 May 1964.

Sci Res Inst of Mathematics & Mechanics, Leningrad State Univ.

L 21581-66 EWT(1)/EWP(m)/EWT(m)/EWP(w)/EWA(d)/T-2/EWP(t)/ETC(m)-6/EWA(1) JD/WW
ACC NR: AT6006912 GS/RM SOURCE CODE: UR/0000/65/000/000/0209/0215

5?
B+1

AUTHOR: Matveyev, S. K.

ORG: Scientific Research Institute of Mathematics and Mechanics LGU, Leningrad (Nauchno-issledovatel'skiy institut matematiki i mekhaniki LGU)

TITLE: Unsteady-state flow of a liquid film formed during melting

SOURCE: Teplo- i massoperenos. t. II: Teplo- i massoperenos pri vzaimodeystvii tel s potokami zhidkostey i gazov (Heat and mass transfer. v. 2: Heat and mass transfer in the interaction of bodies with liquid and gas flows). Minsk, Nauka i tekhnika, 1965, 209-215

TOPIC TAGS: liquid film, laminar boundary layer, liquid flow, fluid surface, melting

ABSTRACT: The author considers melting of a solid subjected to aerodynamic heating. As melting begins, a liquid film is formed which is moved by the pressure gradient and skin friction. The equations of motion for this film are equivalent to the boundary layer equations. The flow is analyzed at times close to the beginning of

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ACC NR: AT6008913

the melting process. It is assumed that the motion of the film is laminar and inertial terms are disregarded in the expression for the momentum. Heat due to friction is disregarded along with pressure in the energy equation. The problem is reduced to the solution of four equations. The proposed method is illustrated by calculating the heating and melting of a pyrex glass cylinder. Orig. art. has: 3 figures and 14 formulas. [14]

SUB CODE: 20/ SUBM DATE: 03Nov65/ ORIG REF: 004/ ATD PRESS: 4218

Card 2/2 vlr

ACC NR: AP7002914 (A) SOURCE CODE: UR/0170/66/011/006/0730/0736

AUTHOR: Matveyev, S. K.

ORG: none

TITLE: An approximate calculation of unsteady ablation of glassy materials

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 11, no. 6, 1966, 730-736

TOPIC TAGS: supersonic aerodynamics, ablation, ablative coating, ablative heat transfer, ablative material, ~~aerodynamic heating,~~ heat transfer ~~rate~~ coefficient

ABSTRACT:
The problem of unsteady ablation of glassy materials subjected to aerodynamic heating is considered. An approximate integral method is outlined for calculating the significant ablation parameters. The temperature distribution is approximated by the exponential function of y and the viscosity is given by $\mu = \exp[(a/T)^m + b)]$. The method is applied to determining heat transfer rates and surface temperature at the stagnation point of a blunted body. The differential equation derived from the equation of conservation of energy is used to calculate the surface temperature of the melted film. A comparison of the numerical results obtained by this method with the exact solution shows satisfactory agreement. It is said that this method may be

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ACC NR: AP7002914

used when similar solutions are not valid and successfully applied to calculations of unsteady melting of a glass shield not only in the stagnation region, but also on the surface of the body. Orig. art. has: 1 figure and 17 formulas.

SUB CODE: 20/ SUBM DATE: 13Jun66/ ORIG REF: 003/ OTH REF: 001/
ATD PRESS: 5112

MATVEYEV, S.M., arkhitektor

Redevelopment of the canter of Moscow. Gor. khoz. Mosk. 35 no.3:28-31 Mr '61. (MIRA 14:5)

(Moscow—City planning)

MATVEYEV, S.M., arkhitktor; STRAVINSKAYA, G.A., inzh.-ekonomist; SEGEDINOV, A.A., inzh.; SHAFRAN, V.L., inzh.; TROFIMOV, V.G., zhurnalist; YEVSTRATOV, N.F., nauchnyy red.; MYASOYEDOV,B.,red.; SHLYK,M.,tekhn.red

[The new boundaries of Moscow]Moskva v novykh granitsakh. Moskva, Mosk. rabochii, 1962. 151 p. (MIRA 15:7)

1. Institut general'nogo plana g.Moskvy (for Matveyev, Stravinskaya, Segedinov, Shafran Trofimov)
(Moscow--Guidebooks)

Matveyev, S.M.

1(2) P. S PHASE I BOOK EXPLOITATION SOV/3265

Moscow. Aviatsionnyy tekhnologicheskiy institut

Nekotoryye voprosy aerodinamiki i dinamiki samoleta (Some Problems in Aerodynamics and Dynamics of Aircraft) Moscow, Oborongiz, 1959. 11 p. (Its: Trudy, vyp. 42) 2,100 copies printed.

Additional Sponsoring Agency: RSFSR. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya.

Ed.: (Title Page): S.I. Zonshayn, Doctor of Technical Sciences, Professor; Managing Ed.: A.S. Zaymovskaya, Engineer.; Ed. of Publishing House: S.I. Vinogradskaya. Tech. Ed.: V.P. Rozhin.

PURPOSE: This collection of articles is intended for the engineering and technical personnel of design offices and scientific-research organizations. It may also be used by students of aeronautical vuzes, specializing in the field of aircraft construction.

COVERAGE: This collection of articles contains some results of scientific research performed by the Aerodynamics and Design of Aircraft Department of MATI

Card 1/6

(Moscow Aviation Technology Institute) during the period 1955 - 1957. The collection considers a number of problems in wing theory for three-dimensional flow and in the dynamics of aircraft, and also methods for research conducted at the initial stages of design and configuration of aircraft. A report by V.T. Dubasov presents a variational method for approximate determination of the velocity field for potential unsteady, compressible and incompressible air flow about bodies. S.I. Zonshayn considers the methods of research performed to determine rational dimensions of aircraft during the initial design stages. The problem is solved in a general formulation, but the obtained results are applied to particular problem for instance, to the calculation of optimum wing loads. In a report by N.Ya. Fabrikant, the theorem regarding the lifting force of a wing, given by N.Ye. Zhukovskiy, is generalized for the case of a rotational three-dimensional flow and a compressible medium. A formula is given for calculating force arising from the mutual interaction of two flows. The results obtained are used for calculating the effect of the accompanying jet on the lift coefficient of the wing and for calculating the load distribution along the span in the region bordering on the wing tip. A report by S.M. Matveyev deals with one of the important problems in aircraft dynamics - the loop - first investigated by N.Ye. Zhukovskiy. The problem is solved for the mathematically simplest case, namely a loop with uniform turning of the flight path. The kinematic and dynamic analysis of the motion of an aircraft is developed up to the calculation of the characteristic of the loop. The formulas obtained turn out to be universal, that is, applicable to any aircraft. A report by A.A. Tupolev makes certain recommendations regarding the configuration of high-speed aircraft. No references are given.

TABLE OF CONTENTS:

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AVAILABLE: Library of Congress

AC/gmp
4-1-60

DUBOVIK, V.N., st. prepodav.; MAMIN, A.U.. kand. geol.-miner. nauk, dots.; OTTO, P.I.;RUMYANTSEVA, A.Ya., kand. geogr. nauk, ispolnyayushchiy obyazannosti dots.; SEREGIN, I.A., st. inzh.; MOSKALEV, A.F.; KOLESNIKOV, B.P., prof., doktor biol. nauk, rektor; OKOROKOV, V.I., kand. biol. nauk, dots.; KLIMENKO, R.A.; STARIKOVA, L.A., assistent; SHUMILOVA, V.Ya., assistent; MAKSIMOVA, Ye.A., dots.; KIRIN, F.Ya., kand. geogr. nauk, dots.; KUZNETSOVA, A.V., red.;MATVEYEV, S.M., red.; MOROZOV, V.K., red.; RUTKOVSKIY, I.M., red.; TYAZHEL'NIKOV, Ye.M., red.

[Nature of Chelyabinsk Province] Priroda Cheliabinskoi oblasti. Cheliabinsk, IUzhno-Ural'skoe knizhnoe izd-vo, 1964. 241 p. (MIRA 18:7)

1. Kafedra geografii Chelyabinskogo pedagogicheskogo instituta (for Dubovik, Mamin, Rumyantseva, Kirin). 2. Nachal'nik geologicheskogo otdela Chelyabinskogo geologorazvedochnogo tresta (for Otto). 3. Chelyabinskaya gidrologicheskaya stantsiya (for Seregin). 4. Nachal'nik pochvennoy partii Chelyabinskoy zemleustroitel'noy ekspeditsii (for Moskalev). 5. Institut biologii Ural'skogo filiala AN SSSR (for Kolesnikov). 6. Kafedra zoologii Chelyabinskogo pedagogicheskogo instituta (for Okorokov, Starikova, Shumilova). 7. Chelyabinskiy rybnyy trest (for Klimenko).

ZARZHEVSKIY, Noy Isaakovich; BERDNIKOV, Sergey Fedorovich;
MATVEYEV, S.M., red.

[Chelyabinsk Tractor Plant] Cheliabinskii traktornyi zavod. Cheliabinsk, Cheliabinskoe knizhnoe izd-vo, 1962. 118 p. (MIRA 17:9)

MATVEYEV, S. N.*
~~MATVEEV, S. N.~~

"On Determination of Heat and Mass Transfer in the Critical Point of a Blunt-nosed Body Moving with Hypersonic Velocity."

Report submitted for the Conference on Heat and Mass Transfer, Minsk, BSSR, June 1961.

* another source gives initials S K.

KRASIL'NIKOV, S.N., zasl. deyatel' nauki prof., doktor voyennykh nauk, general-leytenant, red.; MATVEYEV, S.P., inzh.-polkovnik, red.

[The atom and weapons; scientific and technological progress and military affairs] Atom i oruzhie; nauchno-tekhnicheskii progress i voennoe delo. Sbornik statei. Moskva, Voenizdat, 1964. 339 p. (MIRA 17:12)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932930011-8"

VAKHURKIN, V.M.; GLADSHTEYN, L.I.; KARMILOV, S.S.; KLIMOV, S.A.; LEVITANSKIY, I.V.; MALININ, B.N.; NOSOV, A.K.; PAL'M, Yu.A.; POLYAK, V.S.; POPOV, G.D.; RASSUDOV, V.M.; KRASYUKOV, V.P.; SOKOLOV, A.G.; Prinimali uchastiye: GORBATSKIY, Ye.I.; MATVEYEV, S.S.; STRELETSKIY, N.S., prof., retsenzent; MUKHANOV, K.K., dots., retsenzent; BOLOTINA, A.V., red.; MIKHEYEVA, A.A., tekhn. red.

[Light-weight supporting metal structures] Oblegchennye nesushchie metallicheskie konstruktsii. Moskva, Gosstroiizdat, 1963. 282 p. (MIRA 17:2)

KUDREVICH, Boris Ivanovich; FARMAKOVSKIY, S.F., doktor tekhn. nauk, red.; DOROFEYEV, I.T., kand. tekhn. nauk, nauchn. red.; MATVEYEV, S.S., kand. tekhn. nauk, nauchn. red.; DANISHEVSKIY, L.V., kand. tekhn. nauk, nauchn. red.; KAL', M.M., red.

[The theory of gyroscopic instruments; selected works] Teoriia giroskopicheskikh priborov; izbrannye trudy. Leningrad, Sudostroenie. Vol.2. 1965. 295 p. (MIRA 18:4)

TOMASHOV, N. D.; MATVEYEV, T. V.

Volumetric Analysis

Volumetric method for determining the rate of corrosion and the relationship between the rates of oxygen and hydrogen depolarization; Trudy Inst. fiz. khim. AN SSSR no. 3, 1951.

Monthly List of Russian Accessions, Library of Congress, May 1952. Unclassified.

MATVEYEV, V.; ZIMIN, I.

Operation of drying-cleaning columns. Mukh.-elev. prom. 24 no.4: 22-23 Ap '58. (MIRA 11:5)

1. Adadymskiy elevator, Nazarovskiy rayon, Krasnoyarskogo kraya (for Matveyev). 2. Kurganskiy elevator (for Zimin).
(Grain--Drying)

OSTOLOPOV, A.; IVANOV, A.; MATVEYEV, V.

Direct combine to procurement station system. Muk.-elev.prom. 25 no.12:7-8 D '59. (MIRA 13:4)

1. Saratovskoye upravleniye khleboproduktov (for Ostolopov, Ivanov). 2. Glavnyy inzhener Adadymskogo khlebopriyemnogo punkta Krasnoyarskogo kraya (for Matveyev).
(Grain--Storage)

OSTOLOPOV, A.; IVANOV, A.; MATVEYEV, V.

Direct combine to procurement station system. Muk.-elev.prom. 25 no.12:7-8 D '59. (MIRA 13:4)

1. Saratovskoye upravleniye khleboproduktov (for Ostolopov, Ivanov). 2. Glavnyy inzhener Adadymskogo khlebopriyemnogo punkta Krasnoyarskogo kraya (for Matveyev).
(Grain--Storage)

MATVEYEV, V.

Automatic device for periodic starting and heating up of engines. Avt. transp. 36 no.10:14-16 O '58. (MIRA 13:1)

1. Glavnyy inzhener avtotransportnoy kontory tresta "Tuymazaburneft'". (Automobiles--Engines--Cold weather operation)

DAVIDOVICH, L., kand.tekhn.nauk; MATVEYEV, V., inzh.

Standard designs of individual buildings for garage units. Avt. transp. 36 no.8:16-19 Ag '58. (MIRA 11:9)
(Garages)

MATVEYEV, V., inzh.; SHIGIN, I.

Large precast reinforced concrete industrial building. Stroitel' no.2:3-5 F '60. (MIRA 13:5)

1. Proizvodstvenno-tekhnicheskoye otdeleniye tresta No.2, Voronezh (for Matveyev). 2. Glavnyy inzhener spetsuchastka UNR-570 tresta Stal'konstruktsiya (for Shigin).
(Voronezh--Industrial buildings)
(Precast concrete construction)

MATVEYEV, V., kand. tekhn. nauk

Optical bleaching. Sov. foto 19 no.12:36 D '59. (MIRA 13:3)
(Bleaching agents)
(Photography--Equipment and supplies)

MATVEYEV, V.

AID P - 3128

Subject : USSR/Aeronautics

Card 1/1 Pub. 58 - 14/24

Author : Matveyev, V.

Title : Aircraft model with fuselage and rubber band propulsion

Periodical : Kryl. rod., 10, 18, 0 1955

Abstract : The author gives characteristics, flight performance and diagrams of an aircraft model of his own construction.

Institution : None

Submitted : No date

Matveyev, V.

AID P - 4470

Subject : USSR/Aeronautics - Aircraft (models)

Card 1/1 Pub. 58 - 7/10

Author : Matveyev, V.

Title : Rubber-band Driven Models of Airplanes

Periodical : Kryl. rod., 2, 14-15, F 1956

Abstract : The article discusses the two different types of rubber-band driven motors presently used in the Soviet Union, and the aerodynamic properties of various forms of wings. Preferences of the author are indicated. Some recommendations are made as to the design of the models, fuselage, undercarriage, and propellers. The conditions of stability of the models in flight are analyzed and advice given as to materials to be used in their construction. Two photos.

Institution : None

Submitted : No date

AID P - 5556

Subject : USSR/Aeronautics - Model building

Card 1/1 Pub. 58 - 15/20

Author : Matveyev, V., Sportsman 1/c

Title : Rubber-band motors for aerplane models

Periodical : Kryl. rod., 1, 24-25, Ja 1957

Abstract : An analysis of the properties of rubber-band motors of various types, and practical advices as to the preparation, use, and maintenance of these motors.

Institution None

Submitted : No date

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